

THU FRI RUSH!

Work Order ID 87712

87712

Page 1

July-27-12 9:06:50 AM

Item ID: D3650-3 custom Accept *N900040100* Setup Start *NS1*
 Revision ID: E Stop *NS2*
 Item Name: Center Panel
 Start Date: 7/27/12 Start Qty: 2.00 *2* Cust Item ID:
 Required Date: 8/24/12 Req'd Qty: 2.00 *2* Customer:
 Reference:

Approvals: Process Plan: MLJ Date: 12/07/12 Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3650	Rev C								

100 0.00
 100
 Waterjet
 FLOW CNC Waterjet
 304 .018
 FLOW WATER JET
 Memo cut D3650-3c CUSTOM ORD
 1-Cut as per Dwg D3650
 Dwg Rev: E
 Prog Rev: E
 2-Deburr if necessary
 12-8-7

110 0.00
 110
 QC
 Quality Control
 QC2- Inspect parts off machine FAI/FAIB
 Memo
 12-8-7

SCRAP

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:25%;">Skid-tube <input type="checkbox"/></td> <td style="width:25%;">Crosstube <input type="checkbox"/></td> <td style="width:25%;">Water Jet <input type="checkbox"/></td> <td style="width:25%;">Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>						Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>																								
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>																								
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>																								
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																									
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector																		
Doc/Data <input type="checkbox"/>																											
Equip/Tooling <input type="checkbox"/>																											
Operator <input type="checkbox"/>																											
Material <input type="checkbox"/>																											
Setup <input type="checkbox"/>																											
Other <input type="checkbox"/>																											
Process <input type="checkbox"/>																											
Supplier <input type="checkbox"/>																											
Training <input type="checkbox"/>																											
Unapproved <input type="checkbox"/>																											

FAULT CATEGORY									
Landing Gear			General						
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain	<input type="checkbox"/> Ovalized	<input type="checkbox"/> Pressure/Forced					
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Temperature/Cure					
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Weld					
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Wrong Stock Pulled					
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Part Moved	<input type="checkbox"/> Other					
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Positioned Wrong						
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread	<input type="checkbox"/> Power Loss/Surge						
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset							
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration							
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence							
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions							

Work Order ID 87712

July-27-12 9:06:50 AM

87712

Page 3

Item ID: D3650-3

Accept

N9000040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Center Panel

Work Order ID 87712

July-27-12 9:06:50 AM

87712

Page 2

Item ID: D3650-3

Accept

N9000040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Center Panel

Start Date: 7/27/12 Start Qty: 2.00

2

Cust Item ID:

Required Date: 8/24/12 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

QC8- Inspect parts - second check

0.00

120

QC

Memo

0.00

Quality Control

130

NC BRAKE

0.00

130

Brake NC

Memo

0.00

Brake NC

1-Form as per Dwg D3650 using DT9426

2-bend as per dwg

140

QC5- Inspect part completeness to step on W/O

0.00

140

QC

Memo

0.00

Quality Control

SCB BP

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS			
Part No. _____		Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>
NCR No. _____					

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear	General	
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized
		<input type="checkbox"/> Over/Under tolerance
		<input type="checkbox"/> Part Incorrect
		<input type="checkbox"/> Part Lost/Missing
		<input type="checkbox"/> Part Moved
		<input type="checkbox"/> Positioned Wrong
		<input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced
		<input type="checkbox"/> Temperature/Cure
		<input type="checkbox"/> Weld
		<input type="checkbox"/> Wrong Stock Pulled
		<input type="checkbox"/> Other

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Offset
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Out of Calibration
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Sequence
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Outside Dimensions
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Picklist Print

July-27-12 9:06:50 AM

Page 1

Work Order ID: 87712

Parent Item: D3650-3

Parent Item Name: Center Panel

Start Date: 7/27/12

Required Date: 8/24/12

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A New Issue 07-09-27 DD verified by: EC
 IPP Rev:B ECN 1113P 08-01-22 DD
 IPP Rev:C ecn1162 08-04-02 DD verified by: EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3650-11 Filler Plate		Manufactured	No			160	Each	5.0000	1	2			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				WA021		5							
				45721		5							
M304S26GA 304/316 0.018 SHEET		Purchased	No			160	sf	74.2500	1.145	2.4105264			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				MAT020		74.25							
				117798		74.25							

5.

B12-8-8

Ⓟ

117798

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other		

DART AEROSPACE LTD		Work Order:	87712
Description: Center Panel		Part Number:	D3650-3
Inspection Dwg: D3650 Rev: C		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

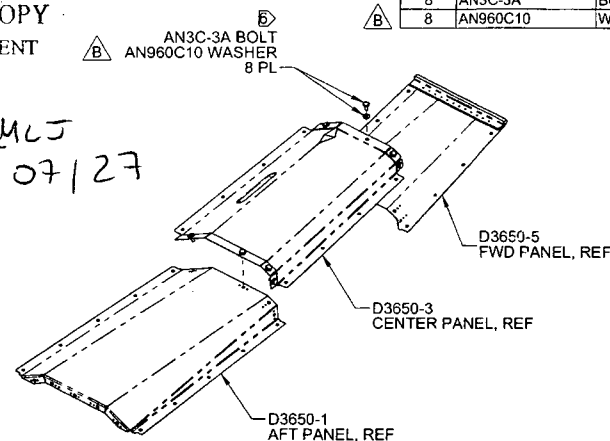
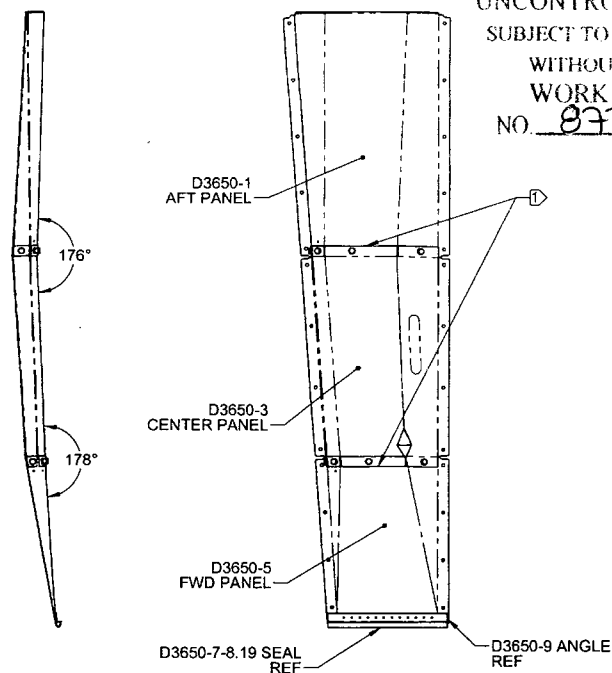
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.221	+0.005/-0.001	.223	L		V B02	
Ø0.213	+0.005/-0.001	.213	2		V	
0.40	+/-0.030	.400	2		V	
15.45	+/-0.030	15.45	2		T B01	
10.49	+/-0.030	10.49	2		Prow 302	
15.53	+/-0.030	15.53	1		T	
11.99	+/-0.030	11.99	2		P	
12.90	+/-0.030	12.90	1		P	
4.300	+/-0.010	4.300	7		V	
12.09	+/-0.030	12.09	2		T	
13.06	+/-0.030	13.06	2		T	
1.943	+/-0.010	1.947	2		V	
5.884	+/-0.010	5.889	2		V	
8.248	+/-0.010	8.251	2		V	
9.196	+/-0.010	9.199	2		P	
13.80	+/-0.030	13.80	2		T	
2.28	+/-0.030	2.286	2		V	
7.19	+/-0.030	7.196	2		V	
9.55	+/-0.030	9.553	2		V	
10.65	+/-0.030	10.66	2		P	
3.35	+/-0.030	3.361	2		V	
0.35 TYP	+ 0.030	0.034			V	
0.40 TYP	+/- 0.030	0.039			V	

Measured by: B	Audited by: S.M.B. / P.D.A.	Preliminary Approval:
Date: 12-8-7	Date: 12-8-7	Date:

Rev	Date	Change	Revised by	Approved
A	08.04.17	New Issue	KJ/DD	
B	12.03.08	Dwg Rev updated	KJ	

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 07712 MJS
12/07/27

QTY	PART NUMBER	DESCRIPTION
-041		
X	D3650-041	TUNNEL TOP PANEL ASSEMBLY
1	D3650-1	AFT PANEL
1	D3650-3	CENTER PANEL
1	D3650-5	FWD PANEL
8	AN3C-3A	BOLT
8	AN960C10	WASHER



DEO ATTACHED

UNDER REVIEW
OK
07.07.08
07.07.08

RELEASE
07.11.17

D3650-041 TUNNEL TOP PANEL ASSEMBLY

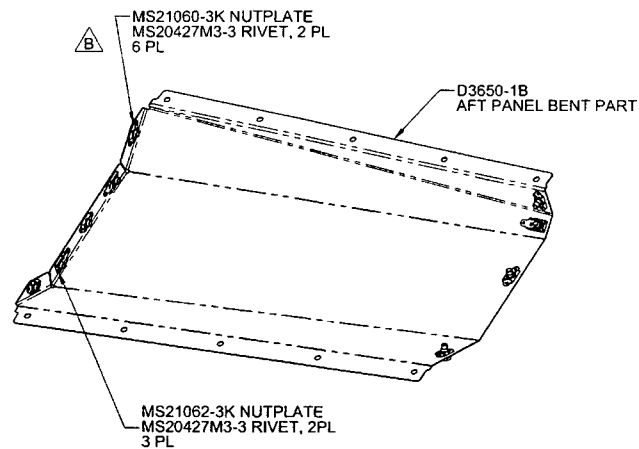
NOTES:

- 1) SEAL ALL MATING SURFACES AND ALL GAPS USING PROSEAL 700 FIRE WALL SEALANT
- 2) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) UNITS: INCHES UNLESS OTHERWISE NOTED
- 4) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 5) IDENTIFICATION: NONE
- 6) TORQUE FASTENERS 15 TO 25 in-lb
- 7) WEIGHT: 3.3 lbs

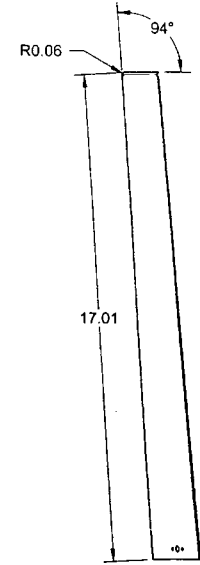
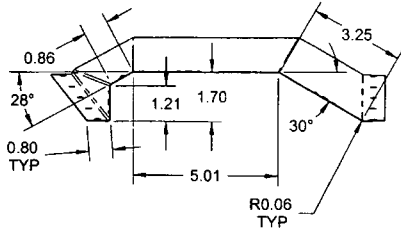
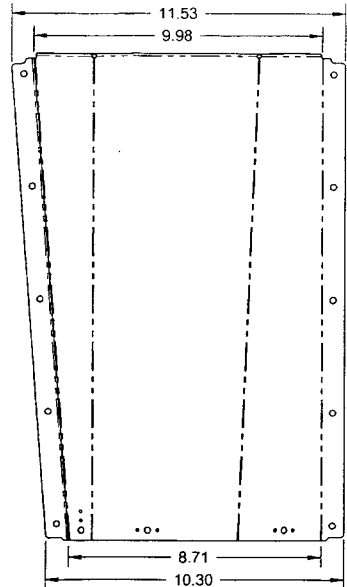
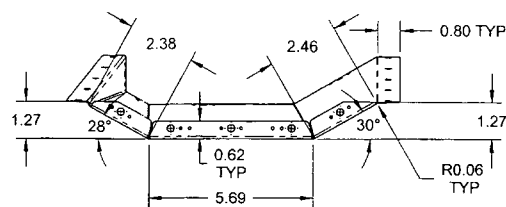
C	REFORMATTED TO NEW STANDARDS; RELOCATED PART LIST (ZN D2-2); ADDED SECTION VIEW J-J & REVISE DIMENSIONS (ZN B7-5, C4-8); ADDED RECESS LOCATION & REVISED DIMENSIONS (ZN C6-8, D5-6); MS20615-4M5 WAS CR3523-4-03 & NAS1149CN432R WAS AN960C4 (ZN D5-7, B5-7, B8-7)	RF	08.10.14
B	SHEETS 1, 2 & 7: UPDATED FASTENER QUANTITIES; UPDATED VIEWS SHEETS 3 & 8: REMOVED/RELOCATED HOLES; UPDATED VIEWS SHEET 4: 1.8 WAS 1.5; 1.0 WAS 0.8; UPDATED VIEW; ADDED NOTE B SHEET 5: REMOVED NOTE IN C6 & ASSOCIATED DIMS; UPDATED VIEWS SHEET 6: REMOVED/RELOCATED HOLES & ADDED CUTOUT TO D3650-3F; MOVED D3650-11F-11F TO SHEET 9; ADDED DETAIL I SHEET 9: RELOCATED D3650-11F-11F FROM SHEET 6; UPDATED DIMS Q- D3650-11F-11F	RF	08.01.07
A	NEW ISSUE	RF	07.11.07
REV.	DESCRIPTION	BY	DATE
DESIGN	RF		
DRAWN	RF		
CHECKED	B		
MFG. APPR.	JP		
APPROVED	JP		
DE APPR.	JP		
DATE	08.10.14		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. D3650		REV. C SHEET 1 OF 9	
TITLE TOP PANEL ASSEMBLY		SCALE 1:8	
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8 7 6 5 4 3 2 1

QTY	PART NUMBER	DESCRIPTION
-1		
X	D3650-1	AFT PANEL
1	D3650-1B	AFT PANEL BENT PART
18	MS20427M3-3	RIVET
6	MS21060-3K	NUTPLATE
3	MS21062-3K	NUT PLATE



D3650-1 AFT PANEL



D3650-1B AFT PANEL BENT PART
(MAKE FROM D3650-1F FLAT PATTERN)

- NOTES:
- 1) FINISH: NONE
 - 2) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 3) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 4) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 5) IDENTIFICATION: NONE
 - 6) WEIGHT: 1.3 lbs

87712

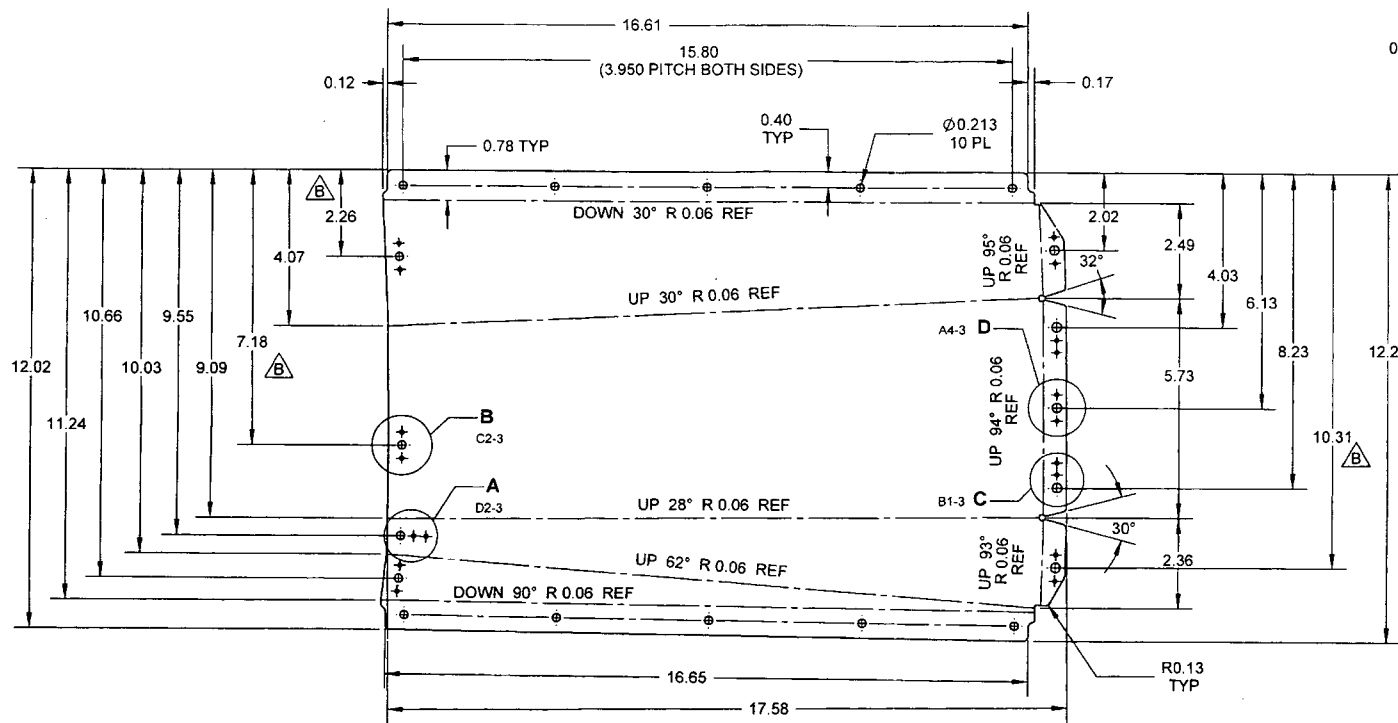
DEO ATTACHED

UNDER REVIEW
[Signature] *[Date]*

RELEASED
[Signature] *[Date]*

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	REV. C
DRAWN	RF		
CHECKED	<i>[Signature]</i>	DRAWING NO. D3650	SHEET 2 OF 9
MFG. APPR.	<i>[Signature]</i>	TITLE	SCALE
APPROVED	<i>[Signature]</i>	TOP PANEL ASSEMBLY	NTS
DE APPR.	<i>[Signature]</i>	COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	
DATE	08.10.14		

8 7 6 5 4 3 2 1

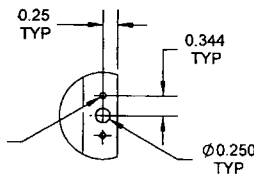


D3650-1F FLAT PATTERN

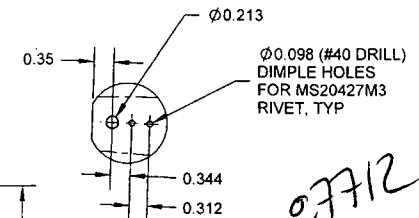
NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL 0.018 THICK (26 GAUGE) SHEET, PER MIL-S-5059 OR AMS 5513/5524 (REF. DART SPEC. M304S26GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.22 lbs

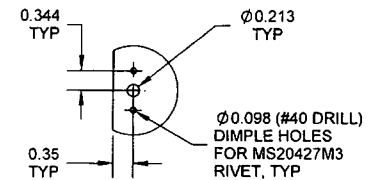
Ø0.098 (#40 DRILL)
DIMPLE HOLES
FOR MS20427M3
RIVET, TYP



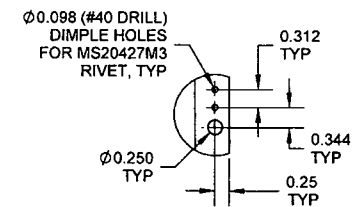
DETAIL D C4-3
SCALE 1.5X



DETAIL A C7-3
SCALE 1.5X



DETAIL B C7-3
SCALE 1.5X



DETAIL C C4-3
SCALE 1.5X

DEO ATTACHED

RELEASED
08/11/17

UNDER REVIEW

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	RF	DRAWING NO. D3650	REV. C
MFG. APPR.		SHEET 3 OF 9	
APPROVED		TITLE TOP PANEL ASSEMBLY	SCALE NTS
DE APPR.		COPYRIGHT © 2007 BY DART AEROSPACE LTD	
DATE	08.10.14	THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE REPRODUCED OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

QTY	PART NUMBER	DESCRIPTION
-3		
X	D3650-3	CENTER PANEL
1	D3650-3B	CENTER PANEL BENT PART
1	D3650-11	FILLER PLATE

87712

IT IS ACCEPTABLE
TO GRIND & LEAVE
0.03 FROM BOTTOM
FLAT SURFACE

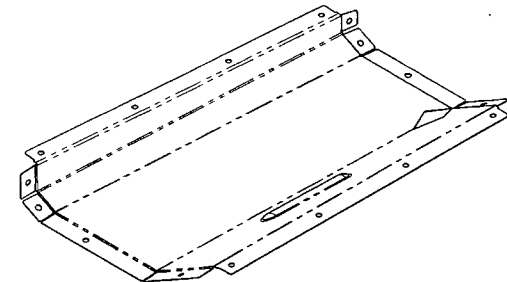
D3650-11

D3650-3B
CENTER PANEL
BENT PART

± 0.1
-0.0 REF

± 1.8
-0.0 REF

D3650-3 CENTER PANEL
(LOOKING FROM OUT SIDE SURFACE)



DEO ATTACHED



RELEASED
2011.17.14

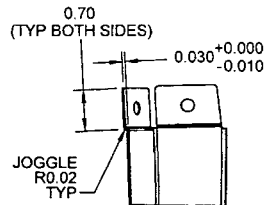
NOTES:

- 1) WELD PER QSI 004
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.0 lb
- 8) TRIM D3650-11 TO FIT AS REQUIRED

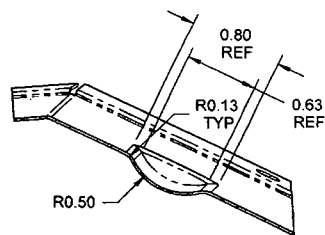
UNDER REVIEW

08.10.14

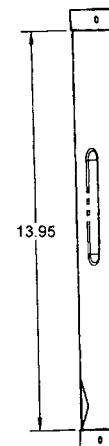
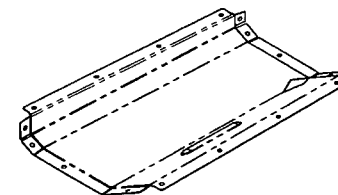
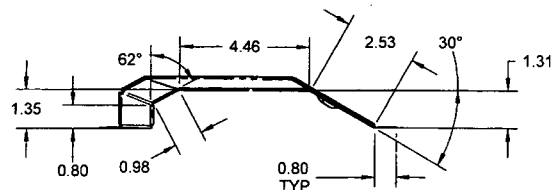
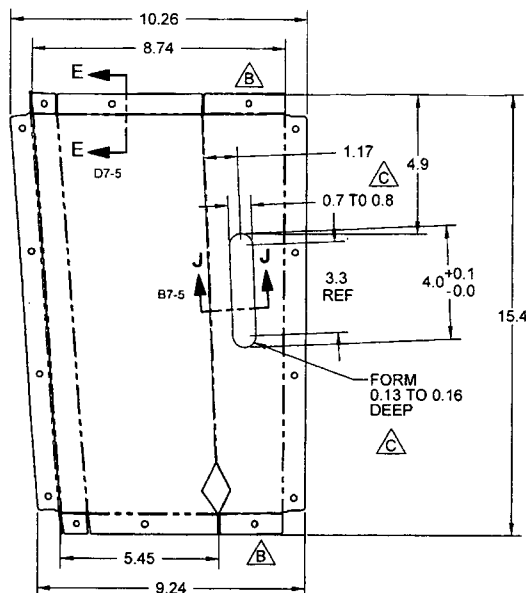
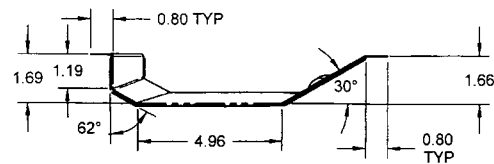
DESIGN	RF		DART AEROSPACE LTD	
DRAWN	RF		HAWKESBURY, ONTARIO, CANADA	
CHECKED			DRAWING NO.	REV. C
MFG. APPR.			D3650	SHEET 4 OF 9
APPROVED			TITLE	SCALE
DE APPR.			TOP PANEL ASSEMBLY	NTS
DATE	08.10.14	<p>COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</p>		



SECTION E-E D5-5
SCALE 2X



SECTION J-J C5-5
SCALE 3.5X



07712

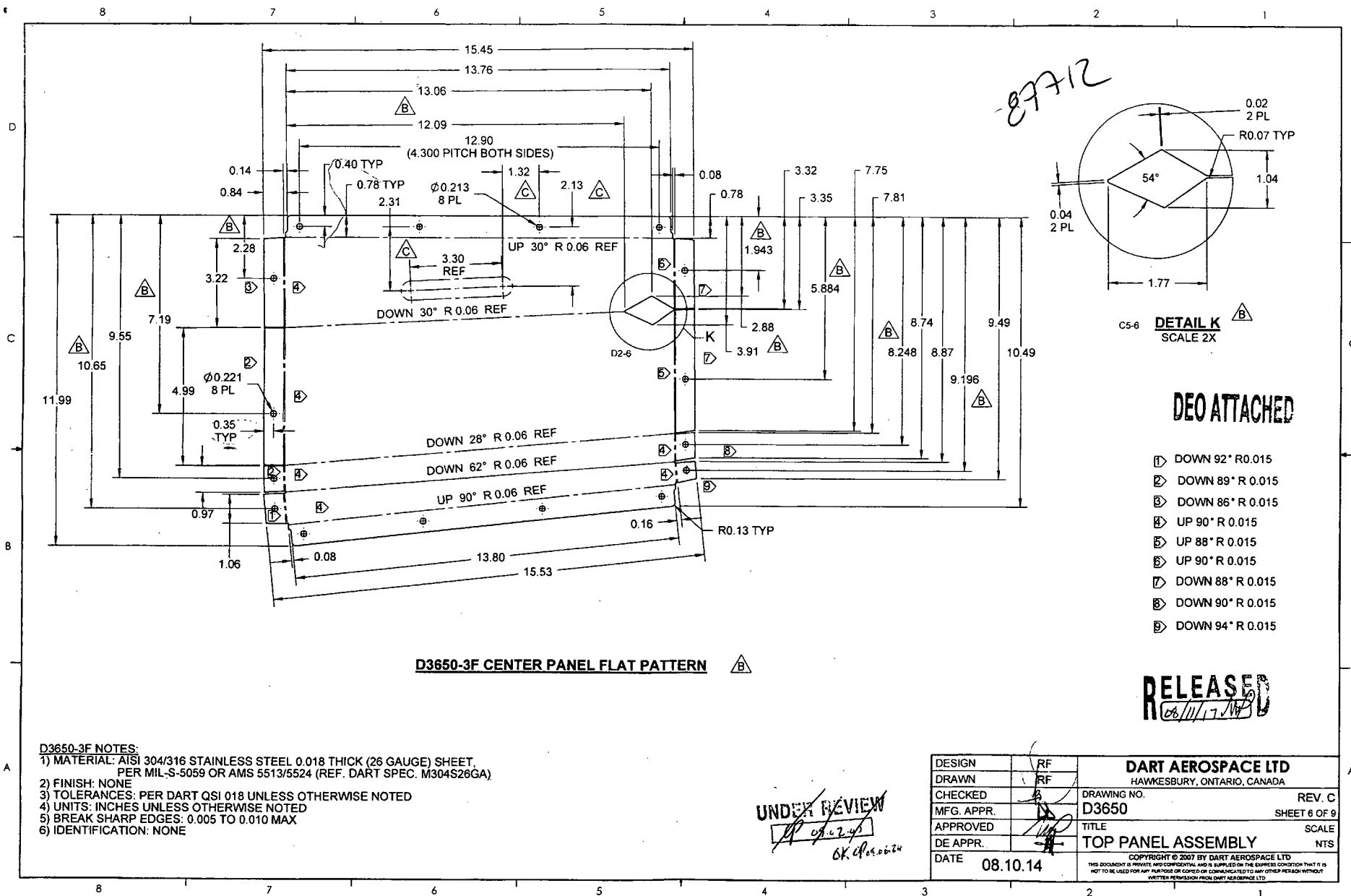
- NOTES:**
 1) FINISH: NONE
 2) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 3) UNITS: INCHES UNLESS OTHERWISE NOTED
 4) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 5) IDENTIFICATION: NONE

D3650-3B CENTER PANEL BENT PART
 (MAKE FROM D3650-3F FLAT PATTERN)

UNDER REVIEW

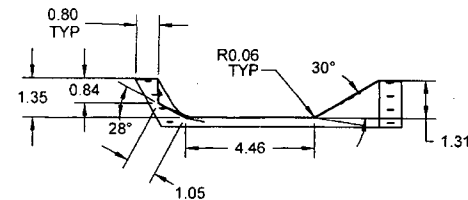
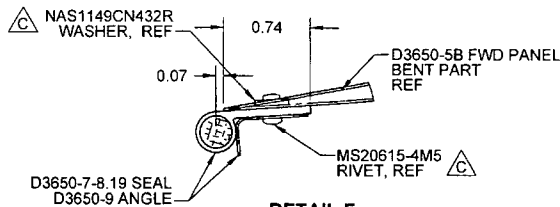
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DRAWN	RF			
CHECKED			DRAWING NO.	REV. C
MFG. APPR.			D3650	SHEET 5 OF 9
APPROVED			TITLE	SCALE
DE APPR.			TOP PANEL ASSEMBLY	NTS
DATE	08.10.14	COPYRIGHT © 2007 BY DART AEROSPACE LTD		
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DEO ATTACHED
 RELEASED

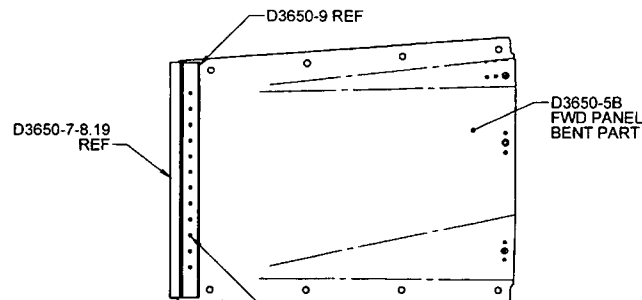
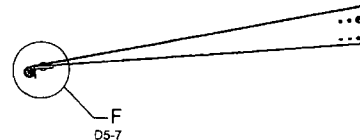


MS21062-3K NUTPLATE
MS20427M3-3 RIVET, 2 PL
2 PL

MS21060-3K NUTPLATE
MS20427M3-3 RIVET, 2 PL
2 PL



D3650-5B
FWD PANEL
BENT PART
REF



PART LIST

QTY -S	PART NUMBER	DESCRIPTION
X	D3650-5	FWD PANEL
1	D3650-5B	FWD PANEL BENT PART
1	D3650-7-8.19	SEAL
1	D3650-9	ANGLE
12	NAS1149CN432R	WASHER
12	MS20615-4M5	RIVET
8	MS20427M3-3	RIVET
2	MS21060-3K	NUTPLATE
2	MS21062-3K	NUTPLATE

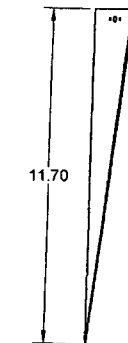
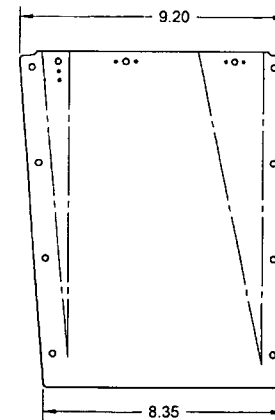
NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL 0.018 THICK (26 GAUGE) SHEET, PER MIL-S-5059 OR AMS 5513/5524 (REF. DART SPEC. M304S26GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.8 lbs

D3650-5 FWD PANEL

CENTRE D3650-7/-9 ON D3650-5B &
TRANSFER Ø0.129 (#30 DRILL) HOLES
FROM D3650-9 TO D3650-7 & D3650-5B
AS SHOWN
INSTALL
MS20615-4M5 RIVET
NAS1149CN432R WASHER
12 PL

UNDER REVIEW
08/10/14

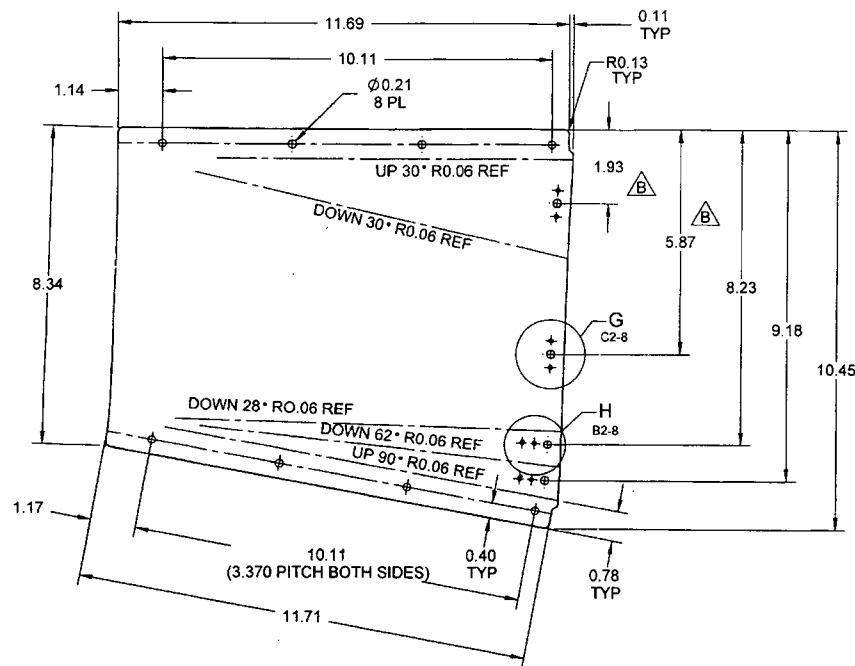


D3650-5B FWD PANEL BENT PART (MAKE FROM D3650-5F FLAT PATTERN)

DEO ATTACHED

RELEASED
08/11/14

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3650	SHEET 7 OF 9
APPROVED		TITLE	SCALE
DE APPR.		TOP PANEL ASSEMBLY	NTS
DATE	08.10.14	COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



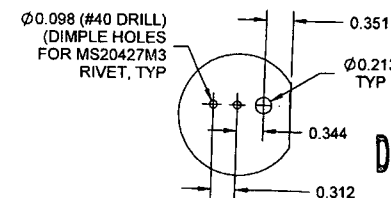
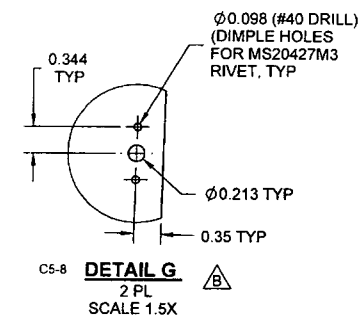
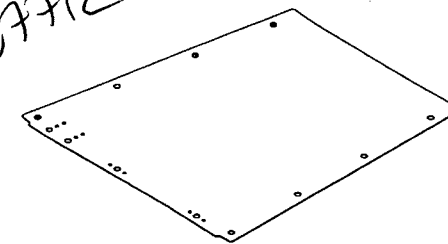
D3650-5F FLAT PATTERN

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL 0.018 THICK (26 GAUGE) SHEET, PER MIL-S-5059 OR AMS 5513/5524 (REF. DART SPEC. M304S26GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.6 lb





UNDER REVIEW
[Signature]
 08.10.14

87712

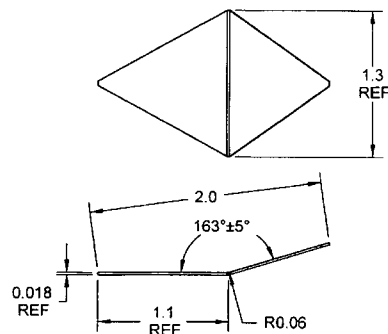


DEO ATTACHED

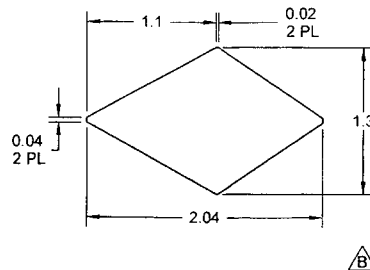
RELEASED
 08/11/17

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3650	SHEET 8 OF 9
APPROVED		TITLE	SCALE
DE APPR.		TOP PANEL ASSEMBLY	NTS
DATE	08.10.14	COPYRIGHT © 2007 BY DART AEROSPACE LTD	
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10



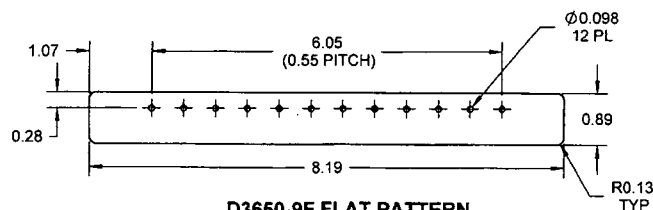
D3650-11 FILLER PLATE
(MAKE FROM D3650-11F FLAT PATTERN)



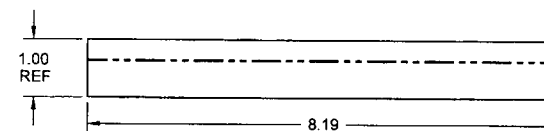
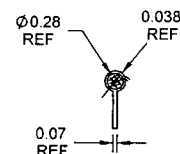
D3650-11F FLAT PATTERN



D3650-9 ANGLE
(MAKE FROM D3650-9F FLAT PATTERN)



D3650-9F FLAT PATTERN



D3650-7-8.19 SEAL

D3650-7-8.19 NOTES:

- 1) MATERIAL: P/N 8168-1 TADPOLE SEAL (REF. BELL P/N 120-104-1)
POSSIBLE SUPPLIER: EAGLE COPTERS OR BELL
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.05 lb
- 8) PART NUMBER: D3650-7-X.XX
WHERE X.XX = LENGTH IN INCHES
EG. 12.50" LONG = D3650-7-12.50

D3650-9 & D3650-11 NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL 0.018 THICK (26 GAUGE) SHEET,
PER MIL-S-5059 OR AMS 5513/5524 (REF. DART SPEC. M304S26GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) D3650-9 WEIGHT: 0.05 lb
D3650-11 WEIGHT: 0.007 lb

UNDER REVIEW
09/07/14
OK 09/07/14

DEO ATTACHED

RELEASED
08/10/14

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO. D3650	REV. C
MFG. APPR.		TITLE TOP PANEL ASSEMBLY	SHEET 9 OF 9
APPROVED		SCALE	NTS
DE APPR.		COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DATE	08.10.14		

87712

DRAWING NO. D3650	TITLE TOP PANEL ASSEMBLY	REV. C	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D3650-C-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN CP	CHECKED	MFG. APPR.	APPROVED	DE APPR.			
DATE 09.06.12	DATE 04.06.15	DATE 09.06.15	DATE 09/06/15	DATE 09/06/15			

TO AMEND D3650-5 FWD PANEL:

REF PAR 09-008. THE QTY(12) NAS1149CN432R WASHERS ARE REPLACED WITH QTY(1) D3893-1 DOUBLER. THE QTY(12) MS20615-4M5 RIVETS ARE REPLACED WITH QTY(12) NAS9307M-4-03 RIVETS. LOCATION OF THE DOUBLER IS SHOWN IN THE AMENDED DETAIL F (DWG SHEET 7) BELOW. THE PARTS LIST FOR D3650-5 IS AMENDED AS FOLLOWS:

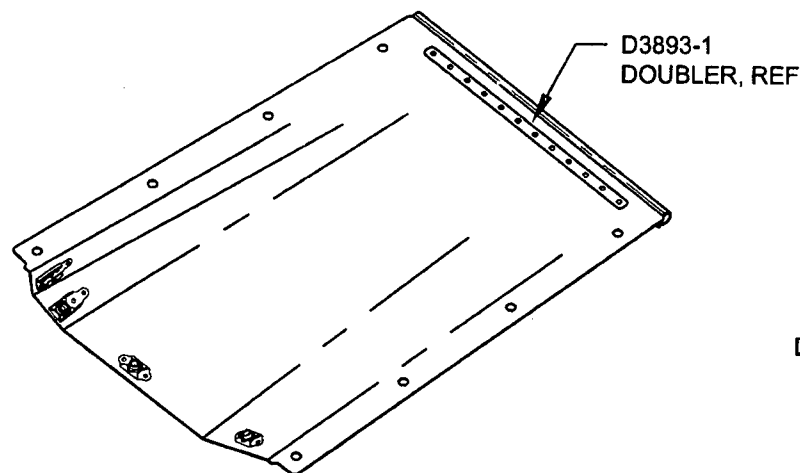
IS:

QTY	PART NUMBER	DESCRIPTION
-5		
1	D3893-1	DOUBLER
12	NAS9307M-4-03	RIVET (OR CR3523-4-03)

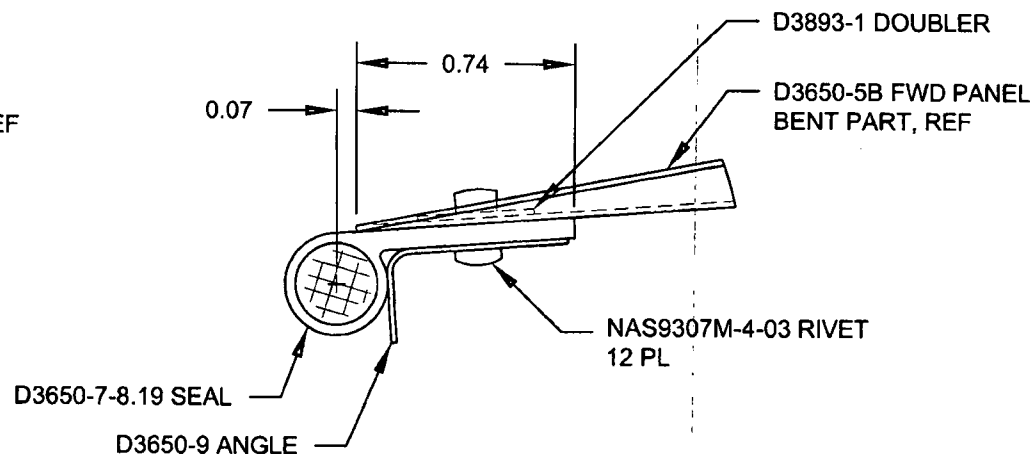
WAS:

QTY	PART NUMBER	DESCRIPTION
-5		
12	NAS1149CN432R	WASHER
12	MS20615-4M5	RIVET

RELEASED
09/06/15



D3650-5 FWD PANEL



DETAIL F C5-7
SCALE 3.5X

